IRVINGTON
Water Quality Report

http://ci.irvington.ny.us
e-mail: village@ci.irvington.ny.us

Water Quality Report

VILLAGE OF IRVINGTON 2001 WATER QUALITY REPORT

The Village of Irvington Water Department provides water service to 6, 631 residents through 1,583 service connections. In 2001 we received 174,304,000 gallons of water or 46.4% from the Croton Aqueduct and 201,385,000 gallons of water or 53.6% fromt he Town of Greenburgh for a total production of 375,689,000 gallons. Water loss due to water main breaks, hydrant flushing and under-registrationn of meters was estimated at 15%.

Our water supply is treated with chlorine to disinfect biological agents. A corrosion inhibitor containing sodium hexametaphosphate, zinc sulfate and sodium bisulfate is added to reduce corrosion of mains in the distribution system and household plumbing. The water supply is not fluoridated when we are using the Croton Aqueduct, but is fluoridated when we are using water fron the Town of Greenburgh (Delaware Aqueduct). Please consult the Village website for additional information on this subject. You can contact the Irvington Water Department by calling Donald Casadone at 914-591-7870. Village offices are in the Town Hall, 85 Main Street, Irvington, New York 10533. Residents wishing to discuss water related matters may call the Village office at 591-7070 or attend Board of Trustee meetings which are held at the Town Hall the first and third Monday's of each month except July, August and September when the summer schedule is enacted, then they are held on the third Monday only.

IMPROVEMENTS

The construction of a new pump station on the Catskill Aqueduct is nearing completion and will be online in the late Summer of 2002.

We continue to replace water mains that are old, undersized and not cement lined as well as fire hydrants as they reach sixty years old.

WATER QUALITY

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams; ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants.

In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elerly, and infants can be particularly at risk from infections. These people should seek advise from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WATER TESTING

The Irvington Water Department submitted 105 samples to the Westchester County Department of Health for bacteriological analysis in 2001.

One sample tested positive for coliform but negative for E.Coli. The four repeat samples taken after this result were negative as were all other samples taken during 2001. Results of the samples tested are shown in the Microbial Parameters Table that follows.

Village Website
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Important Telephone Numbers

{1-800-426-4791 Safe Drinking Water Hotline
{1-800-458-1158 State Radon Program -or-
{1-800-SOS-RADON The EPA's Radon Hotline
{1-518-402-7713 New York State Department of Health
{914-813-5000 Westchester County Department of Health
{914-591-7870 Donald Casadone Irvington Water Department

COST OF WATER

Water rates in the Village of Irvington are set by the Board of Trustees. Residents are billed quarterly in units of 100 cubic feet (748 gallons). A charge for sewer service is added to each unit of water usage.

A few customers in the Town of Greenburgh and Villages of Tarrytown and Dobbs Ferry who receive water from the Village of Irvington pay different rates.

Rates for Village Residents:

Water	$2.02662 per 100 Cubic Feet
Sewer	$0.19170 per 100 Cubic Feet

Rates for Out-of-Town Residents:

Water	$3.35475 per 100 cubic feet
Sewer	$0.31720 per 100 Cubic Feet

CONSERVATION MEASURES

Residents are reminded that water is not an inexhaustible resource and should be used wisely. Central to this is an awareness of how much water is used for various activities.

A good way to check on water usage is to read the water meter (1 cubic foot = 7.48 gallons) before and after an activity such as lawn watering.

Lawns are best watered for short periods before 10:00 a.m. and after 4:00 p.m. This reduces evaporation and promotes deep root growth. Cutting the grass longer shades the roots. Mulch added to shrubs and flower beds retains moisture.

Water is expensive to pump, treat, store and heat. Reducing consumption reduces the strain on facilities during peak use and assures adequate water for firefighting.

The plumbing in your home should be properly maintained. Faucets and toilets should be checked regularly. Use your water meter to detect leaks by reading it over a 15 minute period when no water is being used. A low flow indicator (small red double arrow) on the meter can be of assistance.

Care should be taken to see that sprinklers do not overlap or drop water on the sidewalk, road or driveway. Sprinklers operated by a time clock may run when not needed.

Use water saving devices for faucets and showers.

CRYPTOSPORIDIOSIS & GIARDIASIS

New York State Law requires water suppliers to notify their customers about the risks of Cryptosporidiosis and Giardiasis. These are intestinal illnesses caused by microscopic parasites. Both parasites are resistant to the disinfection action of chlorine, Cryptosporidium especially so.

These parasites can be found in various animal hosts such as cattle, swine, horses, deer, chickens, ducks, fish, turtles, guinea pigs, cats, dogs, geese and seagulls.

Cryptosporidiosis can be very serious for people with weak immune systems such as those on chemotherapy, dialysis or transplant patients, people with Crohn's disease or HIV infection. People with weakened immune systems should discuss with their health care providers the need to take extra precautions such as boiling water, using a certified bottled water or a specially approved home filter. Individuals who think they may have Cryptosporidiosis or Giardiasis should contact their health care provider immediately.

The City of New York ran 106 tests for Giardia and Cryptosporidium from the Catskill/Delaware Aqueducts in 2001. Sixty-nine samples were presumed positive for Giardia with nine samples confirmed positive. Nine samples were presumed positive for Cryptosporidium with none confirmed positive.

At the present time there are no numerical drinking water standards for Cryptosporidium and Giardia

LEAD

Lead may occur in drinking water primarily due to the reaction between minerals in the water and the high lead content solder in use prior to 1986 when it was outlawed.

Pregnant women, infants and young children are more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than desired because of materials used in your home's plumbing. Flushing the tap for 30 seconds to 2 minutes will remove the lead concentrated water. If you wish you may have your water tested at a private laboratory. A listing of such laboratories may be found on page 280 of the Yellow Pages of the Westchester-Putnam telephone book under Laboratories-Testing. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

The Irvington water supply is currently in violation of standars for lead and copper in seven samples out of forty taken.

The lead results range from none detected to a high of .673 MG/L. Copper results range from none detected to 1.58 MG/L.

The completion of a pump station on the Catskill Aqueduct with a new approach to corrosion control is expected to bring the Village into compliance with current regulations.

RADON

Radon is a naturally-occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes.

The Irvington Water Department does not test for radon gas. However, residents are advised that test kits are commercially availble at many locations including the local hardware store. For additional information call your State Radon Program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-RADON).

FILTRATION REQUIREMENTS

The New York State Department of Health sets standards for drinking water. The presence of certain microbiological organisms and contaminants are a serious health concern.

Water treatments such as filtration and chlorination are carefully monitored to meet current department of health Standards. Monthly reports and an annual inspection are used for this purpose.

The temporary exemption to filtration requirements the Village had been operating under has expired. However, construction is well under way on a pump station on the Catskill Aqueduct which does not require filtration.

The completion of this project will bring the Village into full compliance with Department of Health standards.

MICROBIAL PARAMETERS

PARAMETERS (units)	NYS DOH MCL	US EPA MCLG	#SAMPLES	RANGE	AVERAGE	SOURCE
Coliform Bacteria	5%	0	105	0.0-.01	.01	Naturally present in the environment
E. coli (CFU/ml)		0	105	ND	0	Human and animal fecal waste

LEAD AND COPPER RULE SAMPLING AT RESIDENTIAL WATER TAPS

PARAMETERS (mg/L)	NYS DOH MCL	US EPA MCLG	90th PERCENTILE VALUES	#SITES EXCEEDING ACTION LEVEL	SOURCE
Copper	AL= 1.3	1.3	1.399	7 Samples out of 40 taken	Corrosion of household plumbing systens
Lead	**AL=0.015**	**0**	**.041**	**7 Samples out of 40 taken**	**Corrosion of household plumbing systems**

TRIHALOMETHANES

Trihalomethanes are the by-product of drinking water chlorination. They are formed when source water contains large amounts of organic matter.

Testing done for Trihalomethanes in recent years has consistently been within allowable limits of 100 parts per billion. Listed below are the results for the most recent tests done on June 9, 1998. All results are listed in parts per billion.

Bromoform LT	2.00
Bromodichloromethane	6.10
Chloroform	28.00
Dibromochloromethane	2.00

Total 38 parts per billion

DEFINITIONS

- **Action Level (AL)** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Milligrams Per Liter (MG/l)** One part of liquid in one million parts of liquid (parts per million-ppm).
- **Micrograms Per Liter (UG/L)** One part of liquid in one billion parts of liquid (parts per billion - PPB).
- **Nephelometric Turbidity Unit (NTU)** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **N/A (Not Applicable)**
- **ND (Not Detected)** Not detected by available laboratory methods.
- **Maximum Contaminant Level Goal (MCLG)** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG allow for a margin of safety.
- **Maximum Contaminant Level (MCL)** The highest level of a contaminant that is allowed in drinking water. MCl's are set as close to the MCLG as possible

The following principal organic compounds were tested for but not detected: 3-Hydrozycarbofuran,Aldicarb,Aldicarb sulfone, Aldicarb sulfoxide, Caribaryl,Carbofuran, Methomyl, Oxamyl, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCB's, Propachlor, Toxaphene, 2,3,7,8-TCDD(Dioxin), Diquat, Endothall, Glyphosate, 2,4,5-T, 2,4-D, Dalapon, DCPA, Di-Acid, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, EPTC, Butachlor, Metolachlor, Molinate Terbacil, Metribuzin, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 4,4-DDE, Acetochlor, Alachlor, Atrazine, Benzo(a)pyrene, bix(2-Ethylhexyl)adipate,bis(2-Ethylhexyl)phthalate, Hexachlorobenzene, Hexachlorocyclopentadiene, Simazine, *THM-Bromoform, THM-Chloroform, *THM-Dibromochloromethane, 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane,1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-Dichloroethene1,1-dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,4-trimethylbenzene, 1,2-dichlorobenzene, 1, 2-dichloroethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene,1,3-dichloropropane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2-butanone (MEK), 2-chlorotoluene, 4-chlorotoluene, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, cis-1,2-dichloroethene, cis-1,3-dichloropropene, Dibromomethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlobutadiene, Isopropylbenzene, Methy iso-butyl ketone (MIBK), Methyl tert-butyl ether (MTBE) Methylene Chloride, N-butylebenzene, N-propylbenzene, Naphthalene, O-xylene, P & M-xylene, P-isopropyltoluene, SEC-Butylbenzene, Styrene, TERT-butylbenzene, Tetrachloroethene, Toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, Vinyl Chloride, Perchlorate, MTBE, Nitrobenzene.

DRINKING WATER TABLE

PARAMETER	REUSULTS	MCL	MCLG	VIOLATION	LIKELY SOURCE
Alkalinity	59 mg/l *1			No	Erosion of natural deposits
Calcium	22,000 ug/l			No	Erosion of natural deposits
Chloride	58 mg/l	250 mg/l	N/A	No	Naturally occuring/salt road
Color	8 Units	15 Units	N/A	No	May be caused by organic matter
Corrosivity	-1.62	*2		N/A	
Fluoride	<MDL mg/l	2.2 mg/l	2.2 mg/l	No	Water additive
Hardness	5.03 Grains/Gal	*3		No	Erosion of natural deposits
Iron	49 ug/l	300 ug/l	N/A	No	Naturally occuring
Manganese	40 ug/l	300 ug/l	N/A	No	Naturally occuring
Nitrate	0.64 mg/l	10 mg/l	10 mg/l	No	Natural deposits, fertilizer
P.H.	6.86 Units	6.5 - 8.5	6.5 - 8.5	No	
Sodium	30 mg/l	*1	N/A	No	Naturally occuring
Sulfate	12 mg/l	250 mg/l N/A		No	Naturally occuring

***1** No limit has been established at this time. With respect to sodium, water containing more than 20 MG/L should not be used for drinking by people on severly restricted sodium diets. Thoses on moderately restricted sodium diets should not drink water containing more than 270 MG/L of sodium.

***2** Alangelier index value less than zero indicates corrosive tendencies.

***3** Hardness up to 3 grains/gallon is considered soft water, between 3 and 9 moderately hard.

Additional information is available on the Village website.

Village of Irvington
Village Hall
Irvington, New York 10533

RESIDENTIAL CUSTOMER
Irvington, New York 10533